

Less pain does equal better quality of life following strontium-89 therapy for metastatic prostate cancer.

Turner SL, Gruenewald S, et al. British Journal of Cancer 2001; 84(3): 297-302.

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Abstract:

93 patients with hormone refractory metastatic prostate cancer were entered on a prospective study to measure reduction in pain and changes in quality of life (QoL) after the administration of 150 MegaBequerel (MBq) Strontium-89 (Sr-89). QoL was assessed using a validated instrument, the Functional Living Index -Cancer (FLIC) questionnaire. Pain response was measured using the Radiation Therapy Oncology Group scoring system. Overall there was limited QoL improvement over 3 months following Sr-89. However, in the 53 patients (63%) achieving pain responses, QoL did significantly improve within 6 weeks of receiving Sr-89 compared to patients with stable or worsening bone pain, and this was independent of other parameters that might influence QoL outcomes, such as performance status, baseline PSA and extent of skeletal disease ($P = 0.004$). PSA 'response' occurred in 30 patients (37%) over 4 months after Sr-89. This did not appear to correlate with clinical improvement. This study supports the presumption that improvement in pain following Sr-89 is accompanied by better QoL. The lack of correlation of PSA response and clinical parameters indicates that in the palliative setting, PSA may not provide a useful surrogate for treatment outcome.

Comments:

Strengths/uniqueness: This is a prospective study addressing an issue of clinical importance to palliative care physicians. An appropriate and validated assessment tool was used and statistical analysis was appropriately applied. It appeared as if the sample size was appropriate, however no information was presented to justify this determination.

Weakness: No information was provided regarding how patients were recruited. Data was absent regarding the proportion of patients who were followed at the oncology centers and those who were followed by mailed questionnaires and telephone calls. This lack of a controlled study environment may have had an impact on how pain was assessed and how the FLIC questionnaires were filled out. The authors did not mention whether any of the patients were receiving adjunct chemotherapy during the study period.

Relevance to Palliative Care: This study is relevant to palliative care because it suggests that QoL improvement does follow pain reduction for patients with bone metastases from prostate cancer after treatment with Sr-89. This trend is particularly strong in patients earlier on in their disease, for example, those with better ECOG, low baseline PSA, and low bone scan load. For palliative care practitioners, it is a reminder to consider the use of Sr-89 earlier in the disease trajectory for patients with bone pain from prostatic carcinoma metastases.